

20 percent, and a paraffin content greater than 65 volume percent;

(c) unleaded gasolines having a Reid Vapor Pressure less than 7.0 psi, an octane value of at least 87, a 10% D-86 distillation point no greater than 158 °F, a 50% D-86 distillation point less than 193 °F, a 90% D-86 distillation point no greater than 315° F., a paraffin content greater than 50 volume percent, an aromatics content of at least 4.5 volume percent, and an olefin content less than 10 volume percent;

(d) unleaded gasolines having a Reid Vapor Pressure less than 7.0 psi, an octane value of at least 87, a 10% D-86 distillation point no greater than 158 °F, a 50% D-86 distillation point no greater than 210 °F, a 90% D-86 distillation point no greater than 315° F., a paraffin content greater than 50 volume percent, an aromatics content of at least 4.5 volume percent, and an olefin content less than 1 volume percent; and

(e) unleaded gasolines having a Reid Vapor Pressure less than 7.0 psi, a 10% D-86 distillation point no greater than 158 °F, a 50% D-86 distillation point no greater than 210° F., an olefin content less than 10 vol.%, a 90% D-86 distillation point less than 300° F., a paraffin content greater than 50 volume percent, an aromatics content of at least 4.5 volume percent, and an octane value of at least 87;

and thereafter

(2) combusting the unleaded gasoline in said engine;

(3) introducing at least some of the resultant engine exhaust emissions into the catalytic converter; and

(4) discharging emissions from the catalytic converter to the atmosphere.

195. (Thrice Amended) A method for operating an automotive vehicle having a spark-induced, internal combustion engine and a catalytic converter for treating emissions from said engine, the method comprising:

5 (1) introducing into the engine an unleaded, oxygenated gasoline suitable for combustion therein and selected from the group consisting of:

10 (a) unleaded, oxygenated gasolines having a Reid Vapor Pressure less than 7.5 psi, an octane value of at least 87, a 10% D-86 distillation point no greater than 158 °F., a 50% D-86 distillation point no greater than 215 °F., a 90% D-86 distillation point no greater than 315 °F., a paraffin content greater than 65 volume percent, an aromatics content of at least 4.5 volume percent, and an olefin content less than 10 volume percent;

15 (b) unleaded, oxygenated gasolines of octane value at least 87 with a Reid Vapor Pressure less than 7.0 psi, a 10% D-86 distillation point no greater than 158° F., a paraffin content greater than 65 volume percent, an aromatics content of at least 4.5 volume percent, a 90% D-86 distillation point no greater than 315° F., and a 50% D-86 distillation point no greater than 215 °F.;

20 (c) unleaded, oxygenated gasolines of octane value at least 87 with a Reid Vapor Pressure less than 7.0 psi, a 10% D-86 distillation point no greater than 158° F., a 90% D-86 distillation point no greater than 315° F., an aromatics content of at least 4.5 volume percent, and a paraffin content greater than 70 volume percent; and

25 (d) unleaded, oxygenated gasolines of octane value at least 87 with a Reid Vapor Pressure less than 7.0 psi, a 10% D-86 distillation point no greater than 158° F., a 50% D-86 distillation point no greater than 215 °F., a 90% D-86 distillation point no greater than 315° F., a paraffin content greater than 50 volume percent, an aromatics content of at least 4.5 volume percent, an olefin content less than 10 volume percent, and oxygenates present in a total oxygen concentration no greater than the equivalent provided by about 14.9 volume percent methyl tertiary butyl ether;

30 (2) combusting said unleaded gasoline in said engine to yield exhaust emissions, which, after treatment in the catalytic

converter, have, in comparison to combusting fuel A/O AVE, a reduced amount of at least one pollutant selected from the group consisting 40 of NO_x, CO, and unburned hydrocarbons; and

(3) passing emissions from said combusting in said engine through the catalytic converter.

233. (Amended) The method of claim 232 wherein the 50% D-86 distillation point of the unleaded gasoline is [no greater than 210° F.] less than 208° F.

234. (Amended) The method of claim 233 wherein the paraffin content of the unleaded gasoline is greater than 70 volume percent and the aromatics content is at least 9.5 volume percent.

REMARKS

During the interview between the Examiner and applicants' attorney, Gregory F. Wirzbicki, which interview took place at the U.S. Patent and Trademark Office on September 13, 1995, applicants' attorney stated that he discovered a few duplicate claims (e.g., 233/232/181 = 232/181) which could be eradicated by changing the T₅₀ limitation of dependent claim 233 to "less than 208° F." The present amendment introduces this limitation into claim 233, as supported by original claim 39.

In addition, at the interview, applicants' attorney proposed simplifying issues in the present case by amending the independent claims as now to be discussed.

Independent claims 181 and 195 have been amended to require that the gasolines recited in subparagraphs (c), (d) and (e) of claim 181 and in subparagraph (d) of claim 195 contain greater than 50 volume percent paraffins, and that all gasolines of both claims contain at least 4.5 volume percent aromatics. Support for the amendment requiring "greater than 50 volume percent" paraffins can be